Wholesale Market Uplift Payment Procedures (Victoria)

Prepared by:	AEMO Markets
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Approved for distribution and use by:

Approved by:	V. Mouchaileh
Title:	Executive General Manager, Reform Delivery
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Contents

Current version release details

Version	Effective date	Summary of changes
4.1	1 Jan 2023	Changes to: • simplify DTS SP uplift payment quantity (section 4.2) and add consequential new definition of SEA ancillary quantity • Removal of redundant sections for clarity and because residual demand forecast override no longer reported (section 7.2.3, 7.2.6 and 7.3) • Minor editorial amendments. • Updated Procedure template.

Note: There is a full version history at the end of this document.

1. Introduction

1.1. Purpose and scope

These are the Uplift Payment Procedures made under rule 240 of the National Gas Rules (**Procedures**).

These Procedures have effect only for the purposes set out in the National Gas Rules (**NGR**). The NGR and the National Gas Law (NGL) prevail over these Procedures to the extent of any inconsistency.

The Procedures set out the determination of *uplift payments* for each uplift payment category, which in total recover the *ancillary payments* for each *gas day*.

Unless expressly stated otherwise in the Procedure, the version of the Procedure that applies to a *gas day* is the version of the Procedure that was in effect at the start of the *gas day*.

1.2. Definitions and interpretation

1.2.1. Glossary

Terms defined in the National Gas Law and the NGR have the same meanings in these Procedures unless otherwise specified in this clause.

Defined terms are intended to be identified in these Procedures by italicising them, but failure to italicise a defined term does not affect its meaning.

In addition, the words, phrases and abbreviations in the table below have the meanings set out opposite them when used in these Procedures.

Term	Definition
Ad Hoc Operating Schedule	An *operating schedule* produced by AEMO in circumstances covered by NGR 215(4).
Adjusted deviation	As determined in section 7.2.4
AGINO / AGWINO	As defined in the ancillary payment procedures
Amount	An amount of money in dollars and cents. For example, a surprise uplift amount of $15,000.00
annual cap	The limit on total *DTS SP* liability for *uplift payments* under its *service envelope agreement* in dollars for all *gas days* during a calendar year
Common model	A modelled representation of the *declared transmission system* agreed between AEMO and the DTS SP under the *service envelope agreement* as may be updated from time to time to reflect changes to the DTS
Common uplift	An *uplift payment category* as determined in section 8 of these Procedures. Where *total uplift payments* are payable in respect of a *gas day* and *operating schedule*, and are not fully recovered by other *uplift payment categories*, the balance of the *total uplift payments* will be allocated to *Market Participants* in proportion to their *adjusted withdrawals* from the *declared transmission system* in respect of that *gas day*.
Controllable system injection point	A *system injection point* at which a *Market Participant* with may submit *injection bids*
Controllable system withdrawal point	A *system withdrawal point* at which a *Market Participant* with may submit *withdrawal bids*
DTS	The *declared transmission system*
DTS SP	The *declared transmission system service provider*

Term	Definition
DTS SP uplift	An *uplift payment category* as determined in section 4 of these Procedures. *DTS SP uplift* occurs when a transmission constraint is applied by *AEMO* in an *operating schedule* where the *DTS SP* has failed to fulfil its obligations under the *service envelope agreement* and a some or all of the *ancillary payments* are attributable to the failure.
DTS SP uplift event	Where DTS SP uplift occurs as set out in section 4.1 for a *gas day* and an *operating schedule*
DTS SP annual liability cap exceedance uplift	An *uplift payment category* as determined in section 6 of these Procedures. *DTS SP annual liability cap exceedance uplift* is allocated to the *DTS SP* where the total payment in a calendar year for *DTS SP uplift* exceeds the annual cap in the *service envelope agreement*. *DTS SP annual liability cap exceedance uplift* is always a payment to the *DTS SP*.
DTS SP event liability cap exceedance uplift	An *uplift payment category* as determined in section 5 of these Procedures. *DTS SP event liability cap exceedance uplift* is allocated to the *DTS SP* where the aggregate payment rate ($ per GJ) over the *gas day* for *DTS SP uplift* exceeds the event cap in the *service envelope agreement*. *DTS SP event liability cap exceedance uplift* is always a payment to the *DTS SP*.
DTS SP uplift payment	The *amount* of *DTS SP Uplift* payable for an *operating schedule*
DTS SP uplift quantity	The *quantity* of *DTS SP Uplift* for an *operating schedule*
effective demand forecast	A *Market Participant's demand forecast* adjusted for any AEMO *demand forecast override* as set out in these Procedures. A *Market Participant* is allocated an *effective demand forecast* where they have a *deviation* from their *demand forecast* and AEMO has issued a *demand forecast override*.
event cap	The limit on the *DTS SP* liability for *uplift payments* under its *service envelope agreement* in dollars per GJ
negative average ancillary payment rate	Determined for a *gas day* and an *operating schedule* in accordance with the *ancillary payment procedures* ($NAVAPR_s$)
positive average ancillary payment rate	Determined for a *gas day* and an *operating schedule* in accordance with the *ancillary payment procedures* (PAVAPRs)
Quantity	A quantity of gas in GJ For example, a surprise uplift quantity 1,000 GJ
residual uplift payment quantity	Determined for an operating schedule as the total uplift payment quantity less DTS SP uplift quantity if total uplift payment quantity is positive, and the total uplift payment quantity if negative.
SEA ancillary quantity	The estimated ancillary payment quantity ($SEAQD_s$) that would have been applicable to an *operating schedule* if the *DTS* was not affected by a *DTS SP uplift event*, determined in accordance with section 4.2.
SEA capacity	The flow capacity for the portion of the *DTS* affected by a *DTS SP uplift event* as determined using the *common model* and system conditions applicable at the start of the *DTS SP uplift event*.
SEA operating schedule	An *operating schedule* produced by AEMO in manner consistent with NGR 215 and the *gas scheduling procedures*, with the *SEA capacity* used as a constraint
SEA pricing schedule	A *pricing schedule* produced by AEMO in manner consistent with NGR 221 and the *gas scheduling procedures*, with the *SEA capacity* used as a constraint
SIHDQ	Scheduled interval hourly deviation as determined in section 7.2.4(c)
surprise uplift	An *uplift payment category* as determined in section 7 of these Procedures. Surprise uplift is allocated to *market participants* who have not followed their *effective demand forecast* or scheduling *instructions* for the preceding *scheduling interval* or have changed their *demand forecast* and/or have changed *scheduling instructions* for the upcoming *scheduling horizon*.
total uplift payment amount	Determined for a *gas day* and *operating schedule* in accordance with section 3.2 (TUP_s)
total uplift payment quantity	Determined for a *gas day* and *operating schedule* in accordance with the section 3.3 (TUQ_s)

Term	Definition
uplift payment category	Each category of *uplift payment* determined by AEMO in the *uplift payment procedures*

1.2.2. Interpretation

The following principles of interpretation apply to these Procedures unless otherwise expressly indicated:

(a)   These Procedures are subject to the principles of interpretation set out in Schedule 2 of the National Gas Law.

(b)   References to time are references to Australian Eastern Standard Time.

1.3. Related documents

Reference	Title	Location
Ancillary Payment Procedures (NGR 239)	Wholesale Market Ancillary Payment Procedures (Victoria)	AEMO website

2.   Uplift payments – general

The total *amount* of all *uplift payment categories* determined in respect of a *gas day* and *operating schedule* must recover the total *amount* of all a*ncillary payments* determined in respect of that *gas day* and *operating schedule.*

2.1. Total uplift payment amount and uplift payment quantity

The *total uplift payment amount* and *total uplift payment quantity* to be recovered by all *uplift payment categories* for each *operating schedule* for each *gas day* is determined by AEMO in accordance with section 3*.*

2.2. Uplift Payment Categories

The *uplift payment categories* to be determined under these Procedures are as follows:

(a)   *DTS SP uplift*

(b)   *DTS SP event liability cap exceedance uplift*

(c)   *DTS SP annual liability cap exceedance uplift*

(d)   *Surprise uplift*

(e)   *Common uplift*

Each is described in more detail below.

2.2.1. DTS SP uplift[1]

Where a*ncillary payments* are payable in respect of a *gas day* and *operating schedule*, *DTS SP uplift* is allocated to the *DTS SP* where the *DTS SP* has failed to fulfil its obligations under the *service envelope agreement* and some or all of the *ancillary payments* are attributable to the failure.

DTS SP uplift is always a payment by the *DTS SP*.

2.2.2. DTS SP event liability cap exceedance uplift [2]

Where *DTS SP uplift* is payable in respect of a *gas day* and *operating schedule*, *DTS SP event liability cap exceedance uplift* is allocated to the *DTS SP* where the aggregate payment rate ($ per GJ) over the *gas day* for *DTS SP uplift* exceeds the event cap in the *service envelope agreement*.

DTS SP event liability cap exceedance uplift is always a payment to the *DTS SP*.

2.2.3. DTS SP annual liability cap exceedance uplift [3]

Where *DTS SP uplift* is payable in respect of a *gas day* and *operating schedule*, *DTS SP annual liability cap exceedance uplift* is allocated to the *DTS SP* where the total payment in a calendar year for *DTS SP uplift* exceeds the annual cap in the *service envelope agreement*.

DTS SP annual liability cap exceedance uplift is always a payment to the *DTS SP*.

2.2.4. Surprise uplift [4]

Where *total uplift payments* are payable in respect of a *gas day* and *operating schedule*, *surprise uplift* will be allocated to any *Market Participant* which does not inject or withdraw gas in a *gas day* in accordance with that *Market Participant's scheduled injection* or *scheduled withdrawal* (as applicable) for the previous *scheduling interval* or if that *Market Participant*'s *demand forecast* or its *scheduled injection* or *scheduled withdrawal* (as applicable) for the upcoming *scheduling horizon* increase or decrease between the previous and the current *operating schedules*.

Surprise uplift is a payment by the *Market Participant* if the *total uplift payment* for the *operating schedule* is positive.

Surprise uplift is a payment to the *Market Participant* if the *total uplift payment* for the *operating schedule* is negative.

2.2.5. Common uplift [5]

Where *total uplift payments* are payable in respect of a *gas day* and *operating schedule*, and are not fully recovered by other *uplift payment categories*, the balance of the *total uplift*

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[1] Note: Previously included in 2.1.1 Congestion Uplift

[2] Note: Previously included in 2.1.3 Common Uplift

[3] Note: Previously included in 2.1.3 Common Uplift

[4] Note: Previously 2.1.2 Surprise Uplift

[5] Note: Previously 2.1.3 Common Uplift

payments will be allocated to *Market Participants* in proportion to their *adjusted withdrawals* from the *declared transmission system* in respect of that *gas day*.

Common uplift is a payment by a *Market Participant* if the *total uplift payment* for the *operating schedule* is positive.

Common uplift is a payment to a *Market Participant* if the *total uplift payment* for the *operating schedule* is negative.

3. Uplift amounts and quantities

3.1. General

(a) The *uplift payment amounts* and *quantities* for all *operating schedules* for each *gas day* must be determined by AEMO after *ancillary payments* for the *gas day* are determined in accordance with the *ancillary payment procedure*.

(b) AEMO must apply the algorithm set out in section 3.2 (also known as the 'AP flip-flop algorithm') once the *ancillary payment amounts* have been determined for the *gas day.*

(c) The *uplift payment quantities* are derived from the *uplift payment amounts*, so they also reflect the adjusted *uplift payment amounts*.

3.2. Determining the uplift amount for operating schedules

(a) The total *ancillary payment* by *operating schedule* must be determined by AEMO as the sum over all *Market Participants* of the *ancillary payment* to be paid by or to each *Market Participant*, for each *controllable withdrawal point* or *controllable injection point* for each *adjusted bid step* for that *operating schedule* as determined under the *ancillary payment procedures*.

For schedule s the total *ancillary payment* is calculated as follows.

$$TAP_s = ITAP_s + WTAP_s$$

where

$$ITAP_s = \Sigma_{x,point,s,astep} \, AP_{(x,point,s,astep)}$$

where $AP_{(x,point,s,astep)}$ is the final injection *ancillary payment amount* for *Market Participant* x at *controllable injection point* 'point' and *adjusted bid step* 'a step', for *operating schedule* s as determined under *ancillary payment procedures* section 7.4.

$$WTAP_s = \Sigma_{x,point,s,astep} \, AP_{(x,point,s,astep)}$$

where $AP_{(x,point,s,astep)}$ is the final withdrawal *ancillary payment amount* for *Market Participant* x at *controllable withdrawal point* 'point' and *adjusted bid step* 'a step', for *operating schedule* s as determined under *ancillary payment procedures* section 7.5.

(b) The total adjusted *ancillary payment* associated with each *operating schedule* must be determined by AEMO for each *operating schedule* s in turn starting with the first

operating schedule (s=1) and then iterating to the last *operating schedule* (s=5) for the same *gas day*. Positive *total ancillary payments* at one *operating schedule* will be offset with negative *total ancillary payments* at another schedule.

For each schedule s

(i) if s=1 or the total *ancillary payment* for *operating schedule* s>1 is greater than or equal to zero, then the total adjusted *ancillary payment* for *operating schedule* s is set to the maximum of zero and minimum over all *operating schedules* s' from *operating schedule* s to *operating schedule* 5 of the sum over all *operating schedules* s" from *operating schedule* s to *operating schedule* s' of the total *ancillary payments* for those *operating schedules*. This is calculated as follows:

$$\text{TAAP}_s = \text{Max} \{0, \text{Min} [(\Sigma_{s''=s \text{ to } s'} \text{TAP}_{s''}) \text{ for } s'=s \text{ to } 5]\}$$

(ii) if s>1 and the total *ancillary payment* for *operating schedule* s is less than zero then the total adjusted *ancillary payment* for *operating schedule* s is set to the minimum of zero and the total *ancillary payment* for *operating schedule* s plus the sum over all *operating schedule* s' from *operating schedule* 1 to *operating schedule* s-1 of TAP(s') minus TAAP(s').

$$\text{TAAP}_s = \text{Min} \{0, [\text{TAP}_s + \Sigma_{s'=1 \text{ to } s-1} (\text{TAP}_{s'} - \text{TAAP}_{s'})]\}$$

(c) The *total uplift payment amount* to associate with each *operating schedule* s must be determined by AEMO by multiplying the total *ancillary payment* for that *operating schedule* s by the ratio of the total adjusted *ancillary payment* to the total *ancillary payments* over a group of sequential *operating schedule* including *operating schedule* s having the same signed total *ancillary payment*.

This is calculated as follows:

$$\text{TUP}_s = \text{TAP}_s \times (\Sigma_{s' \text{ in GROUP}_s} \text{TAAP}_{s'}) / (\Sigma_{s' \text{ in GROUP}_s} \text{TAP}_{s'})$$

Where GROUP$_s$ indicates the set of sequential schedules containing *operating schedule* s which have the same signed TAP$_s$ value as *operating schedule* s. The rules for defining GROUP$_s$ are:

(i) If TAP$_s \geq 0$, then GROUP$_s$ indicates the set of sequential schedules before and after schedule s that all have TAP$_s \geq 0$

(ii) If TAP$_s<0$, then GROUP$_s$ indicates the set of sequential schedules before and after schedule s that all have TAP$_s < 0$.

Table 1   Example of calculation for total uplift payment

	1	2	3	4	5	Total
TAPs	$900	-$400	-$800	$200	$0	-$100
Group	1	2	2	3	3	
TAAPs	$0	$0	-$300	$200	$0	-$100
TUP	$0	-$100	-$200	$200	$0	-$100

3.3. Determining the uplift payment quantities for each operating schedule

(a) The *total uplift payment quantity* must be determined by AEMO for each *operating schedule* for each *gas day* after *total uplift payment amounts* for the *gas day* have been determined as set out in section 3.2.

(b) The total *uplift payment quantity* for *operating schedule* s is determined as the *total uplift payment amount* divided by the *positive ancillary payment rate* if positive, or *negative ancillary payment rate* if negative:

(i) If *total uplift payment amount* is positive:

$$TUQ_s = TUP_s / PAVAPR_s$$

(ii) If *total uplift payment amount* is negative:

$$TUQ_s = TUP_s / NAVAPR_s$$

4. DTS SP Uplift category

4.1. General

(a) *DTS SP uplift* occurs when a *transmission constraint* is applied by AEMO in an *operating schedule* where the DTS SP has failed to fulfil its obligations under the *service envelope agreement* and some or all of the *ancillary payments* are attributable to the failure. Where these constraints give rise to positive *total uplift payments* in the affected or subsequent *operating schedules* as determined under section 3, some or all of the positive *total uplift payments* will be recovered as *DTS SP uplift* and a *DTS SP uplift event* has occurred.

(b) DTS SP uplift must be:

(i) determined for all *operating schedules* and *gas days*.

(ii) determined before any other *uplift payment categories*

(iii) zero unless a *DTS SP uplift event* has occurred.

(iv) taken to be zero after a *DTS SP uplift event* until the *SEA operating schedules* for the *DTS SP uplift event* have been determined.

(c) Because only positive *total uplift payments* can give rise to *DTS SP uplift,* the *DTS SP uplift* must also always be zero or positive.

4.2. Determining the DTS SP Uplift quantity

(a) When AEMO determines that a *DTS SP uplift event* has occurred, AEMO must use the *common model* applicable to the relevant *gas day* to determine the expected *transmission constraint* that would have applied had the DTS been operating at *SEA capacity* rather than the actual *transmission constraint* used in producing the *operating schedule*.

(b)   AEMO must then use the expected constraint to manually produce an *SEA operating schedule* and an *SEA pricing schedule* for the affected *operating schedule* and all subsequent *operating schedules* for the *gas day*. All other inputs to the *SEA operating schedules* and *SEA pricing schedules* are unchanged from those used in producing the *operating schedules* published on the relevant *gas day.*

(c)   AEMO must estimate the *SEA ancillary quantities* that would have been associated with the *SEA operating schedule* and an *SEA pricing schedule* for the affected *operating schedule* and all subsequent *operating schedules* for the *gas day* in a manner consistent with the determination of *ancillary payments* in the *ancillary payment procedures* but simplified to ignore the impacts of *AGINO* and *AGWINO* (which only affect the payment of *ancillary payments* to *Market Participants*).

(i)   Determine the *SEA ancillary quantity* for the first affected *operating* schedule n as the sum of the simple constrained on injections or withdrawals for each *controllable system injection point* or *controllable system withdrawal point* calculated as the maximum of zero and the difference between the quantities scheduled at that *system point* for the *operating schedule* and the *pricing schedule* for:

(A)   All *system points*; and

(B)   All hours in the *scheduling horizon* for schedule n

$$\text{SEAQD}_{s=n} = \text{Max } [0, Q_s^{\text{SEA OS}} - Q_s^{\text{SEA PS}}] \text{ summed for all } \textit{system points} \text{ for all hours in the } \textit{scheduling horizon} \text{ for the affected schedule n}$$

Note that this value must be positive.

(ii)   Determine the *SEA ancillary quantity* for all subsequent schedules s = n+1 to 5 as the sum of the simple constrained on injections or withdrawals for each *controllable system injection point* or *controllable system withdrawal point* calculated as the maximum of zero and the difference between the quantities scheduled at that *system point* for the *operating schedule* and the *pricing schedule* for:

(A)   All *system points*; and

(B)   All hours in the *scheduling horizon* for schedule s

Less

The simple constrained on injections or withdrawals for the same period of the previous schedule s-1 as the sum of the simple constrained on injections or withdrawals for each *controllable system injection point* or *controllable system withdrawal point* calculated as the maximum of zero and the difference between the quantities scheduled at that *system point* for the *operating schedule* and the *pricing schedule* for:

(C)   All *system points*; and

(D)   All hours in the *scheduling horizon* for current schedule s

$$\text{SEAQD}_{s=n+1} = \text{Max}\,[0,\, Q_s^{\text{SEA OS}} - Q_s^{\text{SEA PS}}] \text{ summed for all } \textit{system points} \text{ and}$$

hours in *scheduling horizon* for schedule s

less

$$\text{Max}\,[0,\, Q_{s-1}^{\text{SEA OS}} - Q_{s-1}^{\text{SEA PS}}] \text{ summed for all } \textit{system points} \text{ and}$$

hours in *scheduling horizon* for schedule s

Note this value can be positive or negative.

(iii) Determine the *DTS SP uplift quantity* for the affected *operating schedule* and all subsequent *operating schedules* for the *gas day* as zero or the positive difference between the positive *total uplift payment quantity* for the *operating schedule* as determined in section 3.3 and the *SEA ancillary quantity*:

Final QD$_s$ = Max [0, Max [0,TUQ$_s$] - SEA QD$_s$]

Note that this value can only be zero or positive

(d) AEMO must determine the final *DTS SP uplift quantity* for an *operating schedule* as zero under the following circumstances:

(i) When AEMO has not determined that a *DTS SP uplift event* occurred; or

(ii) When AEMO has determined that a *DTS SP uplift event* has occurred and where:

(A) The *operating schedule* is before the first affected *operating schedule* in a *gas day*; or

(B) The *total uplift payment quantity* for the *operating schedule* is zero or negative; or

(C) *SEA operating schedules* and *SEA pricing schedules* for all affected *operating schedules* are not available.

4.3. Determining the DTS SP Uplift amount

(a) The *DTS SP uplift payment amount* must be determined by AEMO for all *operating schedules* for each *gas day*.

(b) For the avoidance of doubt, where:

(i) a *DTS SP uplift event* has not occurred for an *operating schedule*, or

(ii) the *Final DTS SP uplift quantity* for an *operating schedule* is less than or equal to zero, or

(iii) the *total uplift payment amount* for an *operating schedule* is zero or negative

then the *DTS SP Uplift payment* for the *operating schedule* must be zero.

DUP$_s$ = zero

(c) The *DTS SP uplift amount* for an affected operating schedule is the Final *DTS SP uplift quantity* multiplied by the positive ancillary payment rate.

$$DUP_s \qquad = \text{Final } QD_s \times PAVAPR_s$$

Note that the *DTS SP uplift amount* will always be positive and is a payment by the DTS SP to AEMO.

(d)   For the avoidance of doubt, the total payment to be made by the *DTS SP* will be the sum of the *DTS SP uplift amount* (if any) to be paid by the *DTS SP* and the sum of DTS SP event liability cap exceedance amount (if any) plus the DTS SP annual liability cap exceedance amount (if any) to be paid to the *DTS SP*.

5.   DTS SP event liability cap exceedance uplift category

5.1.   General

The *DTS SP event liability cap exceedance uplift* is determined for an affected *operating schedule* after the *DTS SP uplift amount* has been determined in accordance with section 4 of this Procedure.

5.2.   Determining DTS SP event liability cap exceedance amount

The *DTS SP event liability cap exceedance uplift* for the affected *operating schedule*s must be determined as the Final *DTS SP uplift quantities* multiplied by the minimum of zero and the difference between the *event cap* and the *positive ancillary payment rate*

$$DELC_s \qquad = \text{Final } QD_s \times \text{Min} \left[0, (\text{event cap} - PAVAPR_s) \right]$$

Note – where the event cap is not exceeded by the *positive ancillary payment rate*, this value will by zero. Where the event cap is exceeded by the *positive ancillary payment rate*, this value will be negative indicating a payment to the DTS SP.

5.3.   Estimate the DTS SP event liability cap exceedance quantity

The DTS SP event liability cap exceedance quantity for the affected *operating schedule*s must be estimated as the *DTS SP event liability cap exceedance uplift amount* divided by the *positive ancillary payment rate* for the *gas day*.

$$DQELC_s \qquad = \qquad D\_ELC_s / PAVAPR_s$$

6.   DTS SP annual liability cap exceedance uplift category

6.1.   General

The *DTS SP annual liability cap exceedance uplift* must be determined for an affected *scheduling interval* after the *DTS SP uplift amount* has been determined for that *operating schedule* in accordance with section 4 of this procedure, and the *DTS SP event liability cap exceedance uplift* has been determined in accordance with section 5 of this procedure.

6.2. Determining DTS SP annual liability cap exceedance amount

(a)   The *annual cap* balance for a *DTS SP uplift event* is the *annual cap* amount remaining in the calendar year of the *DTS SP uplift event* for the affected *operating schedule* s.

(b)   The total payments subject to the *annual cap* for prior *operating schedules* for the affected *gas day*'s calendar year must be determined as the sum of *DTS SP uplift amounts*, *DTS SP* event liability cap exceedance *amounts* and *DTS SP annual liability cap* exceedance *amounts*.

Prior ALC amt $= \Sigma_{\text{current year prior schedules}} (D\_UP_s + D\_ELC_s + D\_ALC_s)$

Note D_ELC and D_ALC are zero or negative

(c)   The total payments subject to the *annual cap* for the current *operating schedule* s must be determined as the sum of *DTS SP uplift amounts* and *DTS SP* event liability cap exceedance *amounts*.

Current ALC amt$_s$ = $(D\_UP_s + D\_ELC_s)$

Note D_ELC is zero or negative

(d)   The *DTS SP annual liability cap exceedance uplift amount* for the affected *operating schedule* s must be determined as the minimum of zero and the sum of *annual cap* less the prior annual liability cap amount less the current annual liability cap for the affected *operating schedule* s.

D_ALC$_s$ = Min [0, Annual cap – Prior ALC amt – Current ALC amt$_s$]

Note D_ALC is zero or negative, indicating a payment to the *DTS SP.*

6.3. Estimate the DTS SP annual liability cap exceedance quantity

The *DTS SP annual liability cap* exceedance *quantity* for the affected *operating schedule* s must be estimated as the *DTS SP annual liability cap exceedance uplift amount* divided by the *positive ancillary payment rate* for the *gas day*.

D_QALC$_s$ = D_ALC_s / PAVAPR$_s$

7.   Surprise uplift category

7.1. General

Surprise uplift is determined by AEMO for every *operating schedule* for every *gas day* after the *DTS SP uplift*, *DTS SP event liability cap exceedance uplift*, and *DTS SP annual liability cap exceedance uplift*, but before the *common uplift.*

7.2. Determine market participant effective demand forecast [6]

(a)   Where a *demand forecast override* increases the total forecast withdrawals by *Market Participant*s, the additional quantity of withdrawals is allocated by AEMO to those *Market Participant*s who have under forecast their withdrawals for the purpose of assigning surprise *uplift payments*.

(b)   Where a *demand forecast override* decreases the total forecast withdrawals by *Market Participant*s, the subtracted quantity of withdrawals is not considered by AEMO for the purposes of allocating *uplift payments*.

7.2.1.   Calculation of adjusted demand forecast override

(a)   If the net effect of all *demand forecast overrides* for all hours of a *scheduling interval* is either zero or a decrease in total forecast withdrawals, then for the purpose of allocating *uplift payments* to *Market Participant*s, the adjusted *demand forecast override* in each hour of that *scheduling interval* will be deemed to be zero.

(b)   If the net effect of all *demand forecast overrides* for all hours of a *scheduling interval* is an increase in total forecast withdrawals and the effect of a *demand forecast override* in an hour within the *scheduling interval* is either zero or a decrease in total forecast withdrawals, then for the purpose of allocating *uplift payments* to *Market Participant*s, the adjusted *demand forecast override* in that hour of that *scheduling interval* will be deemed to be zero.

(c)   If the net effect of all *demand forecast overrides* for all hours of a *scheduling interval* is an increase in total forecast withdrawals and the effect of a *demand forecast override* in an hour within the *scheduling interval* is an increase in total forecast withdrawals, the adjusted demand forecast override is this value multiplied by the ratio created by dividing the cumulative demand forecast override in the *scheduling interval* (which must be positive) by the sum of the hourly *demand forecast overrides* in that *scheduling interval* which exceed zero. This ratio must be greater than 0 and less than 1.

7.2.2.   Allocation of adjusted demand forecast override to Market Participants

(a)   If there is a positive adjusted *demand forecast override* for an hour under clause 7.2.17.2.1, *demand forecast override* in that hour is allocated by AEMO to those *Market Participant*s which withdrew more gas in that hour than their *demand forecast*, but the amount of additional withdrawals allocated to a *Market Participant* must not exceed the amount by which that *Market Participant* exceeded its *demand forecast* for that hour.

(b)   For each hour in the *scheduling horizon* of each *operating schedule*:

(i)   if the adjusted *demand forecast override* exceeds zero but is less than the total amount by which *Market Participant*s exceed their *demand forecasts* for that hour, the adjusted *demand forecast override* is allocated on a pro-rata basis to those *Market Participant*s whose uncontrollable withdrawals of gas from the declared transmission system in that hour exceeded their *demand forecasts* for that hour; and

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[6] Note: Previously Uplift Payment Procedures Section 4 Calculation of market participant effective demand forecast

(ii) if the adjusted *demand forecast override* exceeds the amount by which *Market Participant*s in total exceed their *demand forecasts*, the adjusted *demand forecast override* is allocated to those *Market Participant*s whose uncontrollable withdrawals of gas from the declared transmission system in that hour exceeded their *demand forecasts* for that hour but only up to the actual quantities by which their actual uncontrollable withdrawals exceed their *demand forecasts* for that hour. Where this does not account for the full amount of the adjusted *demand forecast override*, any *uplift payments* associated with the balance of the adjusted *demand forecast override* are recovered by AEMO as common *uplift payments*.

(c) A *Market Participant*'s effective *demand forecast* for each hour within the scheduling interval of an operating schedule is the demand forecast for that Market Participant plus the adjusted demand forecast override for that hour as determined in clauses a) and b) above.

7.2.3. Deleted Residual Demand Forecast Override [7]

7.2.4. Adjusted Deviation

(a) For each hour of the *gas day* for each *Market Participant*, the hourly *deviation* attributable to that *Market Participant* is the *actual imbalance* quantity for that *Market Participant* in that hour less the *scheduled imbalance* quantity for that *Market Participant* in that hour. For the purposes of these Procedures, the hourly imbalance quantity for a *Market Participant* is calculated as that *Market Participant*'s hourly operating *scheduled injection* less the hourly *operating scheduled withdrawal*.

The *demand forecast* used to determine the *scheduled imbalance* for that *Market Participant* is the *demand forecast* of that *Market Participant* as adjusted in accordance with section 7.2.2 of these Procedures to take account of any positive *demand forecast overrides* which may apply in that hour.

(b) The *deviation* for a *Market Participant* for a *scheduling interval* is the aggregate of the positive and negative hourly *deviation*s for that *Market Participant* for all hours of that *scheduling interval*, determined by AEMO pursuant to clause 7.2.4 using the *actual imbalance* quantity and the last *operating schedule published* on that *gas day* to determine that *Market Participant*'s *scheduled imbalances*.

(c) The *scheduled interval hourly deviation* (SIHDQ)for a *Market Participant* for each *scheduling interval* is the aggregate of the negative hourly *deviation* quantities for that *Market Participant* for all hours in that *scheduling interval*, determined in accordance with clause 7.2.4 and using the *actual imbalance* quantity and the last *operating schedule published* on that *gas day* for that day to determine *scheduled imbalances*.

(d) If an *ad hoc operating schedule* is published by AEMO, AEMO must determine the change in constrained on injection quantities resulting from that *ad hoc operating schedule*.

(e) If an *ad hoc operating schedule* is published and the change in constrained on injection quantities determined by AEMO for that *ad hoc operating schedule* is positive, then the

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[7] The residual demand forecast – previously used in V3.0 in determining the uplift payment rates - is no longer determined as the payment rate is now set as equal to the relevant positive or negative ancillary payment rate

effective *deviation* for a *Market Participant* for that *scheduling interval* is the SIHDQ determined in accordance with clause (c).

Otherwise, the effective deviation for a Market Participant for that scheduling interval is the deviation determined in accordance with clause (b).

(f) An allocation factor is used by AEMO to allocate *surprise uplift* attributable to any increase in constrained on injection quantities in a *scheduling interval* following an *ad hoc operating schedule* to *market participant*s who have a non-zero *SIHDQ* for the *scheduling interval* during which the *ad hoc operating schedule* is published.

The allocation factor for a *scheduling interval* in respect of which an *ad hoc operating schedule* is *published* is:

the greater of:

- minus one multiplied by the increase in constrained on injection quantities within that scheduling interval, determined in accordance with clause (d); and
- the sum of all Market Participants' effective deviation within that scheduling interval for that operating schedule

divided by

- the sum of all Market Participants' effective deviation within that scheduling interval for that operating schedule.

(g) The adjusted deviation for a Market Participant for each operating schedule is:

- the effective deviation for that Market Participant for the scheduling interval immediately preceding the current scheduling interval for that operating schedule determined by AEMO in accordance with clause (e).

plus

- the effective deviation for that Market Participant for the scheduling interval for that schedule determined by AEMO in accordance with clause (e), multiplied by any allocation factor applicable for that scheduling interval determined by AEMO in accordance with clause (f), less
- the effective deviation for that Market Participant for the scheduling interval immediately preceding that scheduling interval for that schedule determined by AEMO in accordance with clause 7.2.4(e), multiplied by any allocation factor applicable for the scheduling interval immediately preceding the current scheduling interval for that operating schedule determined by AEMO in accordance with clause (f).

7.2.5.   Surprise uplift quantity for a Market Participant[8]

The *surprise uplift quantity* for a *Market Participant* for each *operating schedule* is:

(a) for the first operating schedule of a gas day:

- minus one multiplied by the adjusted deviation determined in accordance with clause 7.2.4(g).

(b) for the subsequent *operating schedules*:

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[8] Unchanged from section 5.2 of v3.0 of the Procedures

- the amount by which that *Market Participant's effective demand forecast* (determined under clause 7.2.2) has changed for the hours of the *scheduling horizon* of that *schedule* over that *Market Participant's effective demand forecast* of the same hours in the previous *schedule*.

  plus

- the amount by which that *Market Participant's* operating scheduled controllable withdrawals have changed for the hours of the *scheduling horizon* of that *schedule* over that *Market Participant's* operating scheduled controllable withdrawals for the same hours in the previous *schedule*

  minus

- the *adjusted deviation* for that *Market Participant* for that *schedule* determined in accordance with clause 7.2.4(g).

(c)   If this calculation results in:

(i)   a positive *amount*, this may result in that *Market Participant* having to pay *surprise uplift* payments to AEMO for that *scheduling interval* in that *operating schedule*; and

(ii)   a negative *amount*, this may result in that *Market Participant* being paid *surprise uplift* payments by AEMO for that *scheduling interval* in that *operating schedule*.

7.2.6.   <deleted> Surprise uplift quantity for residual demand forecast override[9]

7.3.   <deleted>[10]   Determination of each market participant's surprise uplift quantity for each schedule

7.4.   Determination of the modified surprise uplift quantity for each schedule

(a)   The sum of the *surprise uplift quantities* for an operating schedule for all *Market Participants* is limited by the *residual uplift payment quantity* and is known as the *modified surprise quantity*.

(b)   The *residual uplift payment quantity* after *DTS SP uplift* for an *operating schedule* is determined by AEMO as:

(i)   If the *total uplift payment quantity* is positive, the *total uplift payment quantity* less *DTS SP uplift quantity*

(ii)   if the *total uplift payment quantity* is negative, the *total uplift payment quantity*

(c)   The *modified surprise quantity* for an *operating schedule* is determined by AEMO as:

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[9] The residual demand forecast – previously used in V3.0 in determining the uplift payment rates - is no longer determined as the payment rate is now set as equal to the relevant positive or negative ancillary payment rate

[10] Surprise uplift quantities per market participant are determined in section 7.2.5.

(i)   If the *residual uplift payment quantity* is positive, the minimum of the positive *residual uplift payment quantity* and the total positive *surprise uplift quantities* for all *Market Participants*.

(ii)   If the *residual uplift payment quantity* is negative, the maximum of the negative *residual uplift payment quantity* and the total negative *surprise uplift quantities* for all *Market Participants*.

(d)   A *Market Participant*'s final *surprise uplift quantity* for an *operating schedule* must be determined by AEMO

(i)   If the *modified surprise quantity* is positive, as a proportional share of the residual surprise quantity for that *operating schedule* in the proportion of that Market Participant's positive *surprise uplift quantity* to the sum of the positive *surprise uplift quantities* for all *Market Participants* for that *operating schedule*.

(ii)   If the *modified surprise quantity* is negative, as a proportional share of the residual surprise quantity for that *operating schedule* in the proportion of that Market Participant's negative *surprise uplift quantity* to the sum of the negative *surprise uplift quantities* for all *Market Participants* for that *operating schedule*.

7.5. Determination of the surprise uplift amount for market participant for each schedule

(a)   A *Market Participant*'s *surprise uplift amount* for an *operating schedule* must be determined by AEMO as:

(i)   If the final *surprise uplift quantity* for the *Market Participant* is positive, the final *surprise uplift quantity* multiplied by the *positive ancillary payment rate*

(ii)   If the final *surprise uplift quantity* for the *Market Participant* is negative, the final *surprise uplift quantity* multiplied by the *negative ancillary payment rate*

8.   Common uplift category

8.1. General

(a)   *Common uplift* is determined by AEMO for every *operating schedule* for every *gas day*, after the *DTS SP uplift*, *DTS SP event liability cap exceedance uplift*, *DTS SP annual liability cap exceedance uplift*, and *surprise uplift* have been determined.

(b)   *Common uplift* is determined as an *uplift payment amount*, from which the *uplift payment quantity* is estimated.

(c)   *Common uplift* includes any *DTS SP event liability cap exceedance uplift* and *DTS SP annual liability cap exceedance uplift* payments to the DTS SP

(d)   *Common uplift* is allocated to *Market Participants* in proportion to their a*djusted withdrawals* from the DTS.

8.2. Common uplift amounts

(a)   The total common uplift payment amount for an *operating schedule* for a *gas day* is determined by AEMO as the *total uplift payment amount* less the sum of the *DTS SP uplift amount*, the *DTS SP event liability cap exceedance uplift amount*, the *DTS SP annual liability cap exceedance uplift amount* and the total of the *surprise uplift amount* for all *Market Participants*.

For the avoidance of doubt, because any *DTS SP event liability cap exceedance uplift* and any *DTS SP annual liability cap exceedance uplift* are always a payment to the *DTS SP*, they are always recovered through *common uplift*.

(b)   A *Market Participant's* common uplift payment amount for an *operating schedule* for a *gas day* is determined by AEMO as a proportionate share of the total *common uplift* payment amount in the ratio of the *Market Participant's adjusted withdrawals* from the DTS to the total of all Market Participant's *adjusted withdrawals* from the DTS.

8.3. Estimated common uplift payment quantities

(a)   The estimated total *common uplift payment quantity* for an *operating schedule* for a *gas day* is determined by AEMO as the *total uplift payment quantity* less the sum of the *DTS SP uplift quantity*, the *DTS SP event liability cap exceedance uplift quantity*, the *DTS SP annual liability cap exceedance uplift quantity* and the total of the *surprise uplift quantity* for all *Market Participants*.

(b)   A *Market Participant's* estimated *common uplift payment quantity* for an *operating schedule* for a *gas day* is determined by AEMO as a proportionate share of the total *common uplift payment quantity* in the ratio of the *Market Participant's adjusted withdrawals* from the *DTS* to the total of all *Market Participant's adjusted withdrawals* from the *DTS*.

Version release history

Version	Effective date	Summary of changes
4.0	1 January 2023	Updated to reflect the AEMC's DWGM improvement to AMDQ regime, Rule determination, 12 March 2020: • Remove AMIQ, Congestion Uplift • Add uplift categories • Recover uplift payments using average ancillary payments and adjusted uplift quantities
3.0	25 October 2016	• Update to reflect the National Gas Amendment (DWGM-AMDQ Allocation) Rule 2016 No. 1 • As a consequence of the above rule change it is required to take AMDQ CC into account in clause 3.6 for the determination of Uplift hedge for the Longford CPP. Add missing clause 6.1 heading, and correct reference in clause 6.4 from clause 6.1 to clause 6.2. • Update document to current procedure format.
2.1	1 May 2012	• Updated to reflect that IHN and AIHN are by CPP, not by SIPs. • Emphasised that Market Participants can update their AMIQ profile during the gas day, but only the AMIQ profile submitted for the last schedule is used for AMIQ calculation. Clarified that the total uplift payments for an operating schedule is equal to the total ancillary payments for that schedule adjusted for 'AP clawback' as per the Ancillary payments functional design v9.0. • Included Mortlake system injection point in the Iona CPP group. • Removed 'LNG' from 'Authorised MDQ/ AMDQ credit certificate location' column in the CPP table and replaced it with 'N/A'. • Deleted '2:00 AM' from the AMIQ Profile Limit table.
2.0 (NGR)	5 February 2011	Changes in section 3.2, daily tariff V authorised MDQ updated every gas day rather than every business day
1.0 (NGR)	16 August 2010	Rebranded and updated for NGR
5.3	May 2009	Updated to include the daily apportionment of tariff V AMDQ in Clause 4.2
5.2	May 2008	• Headings 8.4 and 8.5 where repeated with all references being to the contents in 8.5. The heading 8.5 has been removed with all cross references corrected to be to 8.4. • Correction of AP flip flops has been incorporated.
5.1	January 2007	• Remove words "minus one multiplied by" written into sections 8.1, 8.2 and 8.3. • Amend errors detected in version 5.0 • Provide further clarity in some of the clauses • Note, Version 5.0 was superseded by this version before it was implemented
5	11 Nov 2005	Rewrite for Gas Market Project
4	20 Aug 2004	• Correct references between uplifts procedures clause 5.2 and 5.3 and MSO Rules clause 5.1.4. Alter clause 5.1 and 5.2 to remove words "by Market Participant" which were erroneously inserted in a previous version of these procedures Correct "reference documents" section • Reword section 3.3 • Clarification that compressor fuel gas is excluded from Cumulative D AMDQ exceedance (clause 6.3.1)
3	26 Nov 2002	Incorporates new concepts of conditional transfers and interchangeable close proximity injection points
2	May 2002	Complete rewording to align with the function design document Procedures extended to include site AMDQ credits
1	2nd July 2001	First issue.